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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/916,270 | 07/30/2001 | Hsin-Yu Kuo | 4425-167 | 8682 |

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| EXAMINER |
|---|
| PAIK, STEVE S |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2876 | |

DATE MAILED: 05/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 09/916,270 | KUO ET AL. | |
| | Examiner | Art Unit | |
| | Steven S. Paik | 2876 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *18 March 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-7,9-12 and 14-24* is/are rejected.

7)☒ Claim(s) *2,8,13 and 25* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *30 July 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

## DETAILED ACTION

### *Response to Amendment*

1. Receipt is acknowledged of the Amendment filed March 18, 2003.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1 and 3-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harada et al. (US 5,810,928) in view of Nakasuji et al. (US 5,945,660).

Re claims 1, 3 and 4, Harada et al. discloses an apparatus and a method for interlocking material supply equipment (cylinder box 1 contains gas cylinders 2 and 4 which is considered to be a material supply equipment in semiconductor manufacture system). The apparatus and method comprise a controller measuring gas component concentration of special material gases for semiconductor used in semiconductor production in an actual production process line (inline), and a semiconductor equipment and apparatus for supplying special material gases for semiconductor into which a gas component concentration meter utilizing the measuring method. The apparatus can prevent any accident such as erroneous connection, erroneous piping, or erroneous exchange from occurring. Furthermore, the invention provides an apparatus for supplying special material gases for semiconductor which can identify kinds, concentrations, and flow rates of component gases of a mixed gas flowing through a mixed gas pipe line so that the

kind, concentration, and flow rate of each component gas supplied from a gas cylinder are checked and prevents any accident such as erroneous connection, erroneous piping, or erroneous exchange from occurring. The system comprises a controller (col. 1, ll. 10-22), a detector that identifies and measures the gas component and concentrations of special material gases for semiconductor (col. 2, ll. 43-65), and a plurality of alarm devices receiving a message (signal, col. 3, ll. 9-13) from the controller (monitor). When any abnormality occurs (alarming function), the electromagnetic valve can be immediately closed.

Although Harada teaches the claimed limitations discussed above, the reference is silent about a bar-code scanner wireless communicating with a wireless controller.

Nakasuji et al. discloses a communication system for wireless barcode reader. The barcode reader (shown in Fig. 1) communicates with a wireless controller via radio frequency transmitting section and transmitter antenna. The communication system further comprises a notification system to communicate with an operator of the status of data transmission. The wireless barcode reader obviously provides a user with a great deal of flexibility and portability over wired barcode reader (col. 4, ll. 41-64).

Therefore, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to incorporate the wireless communication system for a barcode reader, as taught by Nakasuji et al. into detector system of Harada et al. since the flexibility and portability provided by a wireless barcode reader can improve the detecting process of Harada et al. and improves production while reducing the potential safety hazard risks caused by erroneous connections and mixing of special gases or solutions.

Regarding claims 5-7, Harada et al. in view of Nakasuji et al. discloses the apparatus as recited in rejected claim 1 stated above, where the transmission system comprises a wireless communication and an input/output device (the transmitter antenna and the receiver antenna are wireless communicating devices. The wireless barcode reader is an input device and the host computer, which decodes the coded information and present result is an output device. As understood by a person having ordinary skill in the art, the host computer interprets the coded information and processes the information in accordance with production plan which includes managing the material supply equipment.)

4. Claims 9-12 and 14-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harada et al. (5,810,928) as modified by Nakasuji et al. (US 5,945,600) as applied to claims 1 and 3-7 above, and further in view of Pirelli (USP 5,537,313).

Re claims 9-12 and 14-24 Harada in view of Nakasuji et al. teaches all the features of claimed invention with the exception of specifically disclosing the collecting means for collecting a user's information.

Pirelli discloses a supply distribution chain involving items being received, stored, dispensed, and ultimately replaced. The distribution method involves using a central computer and at least one workstation for tracking inventory of a plurality of items. The workstation can also communicate with central computer wirelessly. These items could include medication, meals, office supplies, rental equipment, magazines, newspapers, candy, etc. The method comprises the steps of inputting to the central computer, item information for each item, inventory information for each item, user information for each user, and consumer information for each consumer. The item information includes item name, item bar code, item cost, and item

charge status. The inventory information includes number of items in inventory referenced to item name, item bar code, and item cost. The user information includes user name, user bar code, and user access data (col. 2, ll. 40-58). The chain system has a few advantages: First, it provides accurate information about its users and access level that keeps the record of each activity. It further provides an automated accounting and inventory system to manage cost and replenishment process efficiently.

Thus, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to further incorporate the distribution chain system collecting user information and item (material) information, as taught by Pirelli in addition to the teachings of Harada et al. in view of Nakasuji et al. since the distribution chain system provides keeping accurate information regarding to its users and their activity with improved cost and replenishment process efficiency.

***Allowable Subject Matter***

5. Claims 2, 8, 13 and 25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter: none of the prior art of the references discloses, teaches or fairly suggests a wireless communication system reading barcode information comprises, among other things, software having a function of by-passing bar-code, and the bar-code information further including an identification of the equipment material for checking the wireless controller.

***Response to Arguments***

7. Applicant's arguments with respect to claims 1-25 have been considered but are moot in view of the new ground(s) of rejection.

The applicant amended claims 1-5, 7-9, 13-17, 19-21 and 25. The examiner has applied a newly found reference teaching a wireless barcode reading system to discuss the added limitations. Accordingly, claims 1, 3-7, 9-12, and 14-24 are rejected under 35 U.S.C. § 103 (a). Claims 2, 8, 13 and 25 are objected.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven S. Paik whose telephone number is 703-308-6190. The examiner can normally be reached on Mon - Fri (7:00am-3:30pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on 703-305-3503. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0530.

*Steven Paik*
Steven S. Paik
Examiner
Art Unit 2876

ssp
May 21, 2003

MICHAEL G. LEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800